Ac	ccession Number:	(Tech Transfer Use only) MATERIAL TRANSFER AGREEMENT HUMAN			
Ad Sta	This Material Transfer Agreement ("MTA") has been adopted for use by the National Institutes of Health ("NIH"), the Food and Drug Administration ("FDA"), and the Centers for Disease Control and Prevention ("CDC"), collectively referred to herein as the United States Public Health Service ("PHS") within the Department of Health and Human Services ("DHHS"), in all transfers of research material ("Research Material") whether PHS is identified below as its Provider or Recipient.				
Pro	rovider: Nat	ional Institute of Environmental Health Sciences			
Re	ecipient:				
	1. Provider agrees to tra	nsfer to Recipient's Scientist the following Research Material:			
De	escription (use Appendix 2 to	o describe and list if necessary)			
To	otal number of individual i	tems included in this MTA, which are classified as:			
		data that are still attached to a readily available subject identifier such as a name, social security one number, medical record number, etc., or whose identity can be readily obtained			
		ected samples or data that are unidentified for research purposes by use of a random or arbitrary that may still be linked to their sources through use of a key to the code available to an ator.			
	Coded/Nontraceable: s receiver to identify spec	amples and/or data will be coded, however that code cannot be used by either the sender or the cific individuals			
	have been irreversibly s code is destroyed, thus	I: human data or samples that were initially collected with identifiers but, before research use, stripped of all identifiers by use of an arbitrary or random alphanumeric code and the key to the making it impossible for anyone to link the samples to the sources. This does not preclude inical, pathological, and demographic information before subject identifiers are removed.			
	Patient data will be requ	nested in the future.			
Th	his material was or will be	collected under: Protocol no:			
Pro	rotocol name:				
		s collected according to 45 CFR Part 46, Protection of Human Subjects under Federal Wide Assurance IS RESEARCH MATERIAL MAY NOT BE USED IN HUMAN SUBJECTS.			
3.	Human Subject Protection				
	within the meaning of 45	rch: The Research to be conducted under this Agreement involves Human Subjects or human tissues C.F.R. Part 46, and its performance will conform to applicable federal laws and regulations. Additional rom the HHS Office for Human Research Protections. The Recipient's protocol is subject to:			
	IRB Review (appro	val attached)Continuing IRB Review (approval attached)IRB Exempt			
		privacy of the human subjects, the Recipient and the Recipient Scientist agree that it will not contact or ify individuals, families, communities, tribes or populations which are or may be the sources of the			
4.	This Research Material	will only be used for research purposes by Recipient Scientist in his/her laboratory under suitable			

containment conditions for the Research Project described with specificity in the *attached Appendix1*. Recipient agrees to comply with all Federal rules and regulations applicable to the Research Project and the handling of the Research Material.

5. Confidentiality

- a. For the purpose of this agreement "Confidential Information" shall mean any information, raw data, or results disclosed or generated by any party to this agreement concerning the Research Material transferred under this Agreement whether or not stamped "Confidential". Summary data, defined as tables of aggregate results, are not Confidential Information.
- b. Recipient and any agent agree to maintain the confidentiality of the Confidential Information, such efforts to be no less than the degree of care employed to preserve and safeguard its own confidential information. The Confidential Information shall not be disclosed, revealed, or given to anyone by Recipient except to employees or agents of Recipient who have a need for the Confidential Information in connection with the Research Project, and such employees or agents shall be advised of the confidential nature of the Confidential Information and that the Confidential Information shall be treated accordingly.
- c. The obligations of a Party under this Paragraph 5 shall not extend to any part of the Confidential Information:
 - (i) that can be demonstrated to have been in the public domain or publicly known at the time of disclosure; or
 - (ii) that can be demonstrated to have been in the possession of or that can be demonstrated to have been readily available to such Party from another source prior to the disclosure; or
 - (iii) that becomes part of the public domain or publicly known by publication or otherwise, not due to any unauthorized act by such Party; or
 - (iv) that can be demonstrated as independently developed or acquired by such Party without reference to or reliance upon such Confidential Information.
- d. Nothing herein shall prevent Provider or Recipient from complying with a legal obligation to disclose Confidential Information. Fulfillment of such a legal obligation does not release either party from the remaining confidentiality obligations of this Article 5.
- 6. This Research Material represents a significant investment on the part of Provider and is considered proprietary to Provider. Recipient's Scientist therefore agrees to retain control over this Research Material and further agrees not to transfer the Research Material to other people not under her or his direct supervision without advance written approval of Provider. Provider reserves the right to distribute the Research Material to others and to use it for its own purposes.

When the Research Project is completed the unused Research Material, at the request of the Provider, will returned to the Provider or discarded in compliance with all applicable statutes and regulations. In addition:

- a. The Recipient and the Recipient Scientist agree to provide all results to the Provider Scientist within 30 days of completing each analysis. In all oral presentations or written publications concerning the Research Project, the Recipient and the Recipient Scientist will acknowledge Provider's contribution of this Research Material unless requested otherwise.
- b. Before the Recipient or the Recipient Scientist submits a paper or abstract for publication or otherwise intends to publicly disclose information about the Research Material, Recipient and the Recipient Scientist shall ensure that Provider has at least thirty (30) days to review the proposed publication or disclosure. Provider reserves the right to delete or modify information that might reasonably be viewed as offensive to the human subjects involved.
- 7. This Research Material is provided as a service to the research community. IT IS BEING SUPPLIED TO RECIPIENT WITH NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Provider makes no representations that the use of the Research Material will not infringe any patent or proprietary rights of third parties.
- 8. When Provider is the PHS: Recipient shall retain title to any patent or other intellectual property rights in inventions made by its employees in the course of the Research Project. Recipient agrees not to claim, infer, or imply endorsement by the Government of the United States of America (hereinafter referred to as "Government") of the Research Project, the institution or personnel conducting the Research Project or any resulting product(s). Unless prohibited by law from doing so, Recipient agrees to hold the Government harmless and to indemnify the Government for all liabilities, demands, damages, expenses and losses arising out of Recipient's use for any purpose of the Research Material.
- 9. When Recipient is the PHS: The PHS shall retain title to any patent or other intellectual property rights in inventions made by its employees in the course of the Research Project. The PHS is not authorized to promise rights in advance for inventions developed under this Agreement. Provider acquires no intellectual property rights under this MTA, but may apply for license rights to any patentable invention that might result from this Research Project. It is the intention of PHS that Provider not be liable to PHS for any

claims or damages arising from PHS's use of the Research Material; however, no indemnification is provided or intended.

10. The undersigned Provider and Recipient expressly certify and affirm that the contents of any statements made herein are truthful and accurate.

PLEASE OBTAIN SIGNATURES IN THE ORDER PRESENTED

PROVIDER INFORMATION	
Provider Scientist: (Name)	(Title)
(Phone)	(email)
Federal and Local Laws, Assurances, and Institutional	aterial was collected and is provided in accordance with appropriate Review Board (IRB) approvals relating to Human Subjects Research to the Recipient Institution and Recipient Scientist as listed earch Project.
Signature of Provider Scientist:	Date:

RECIPIENT INFORMATION and AUTHORIZED SIGNATURE Recipient Organization: Authorized Signature for Recipient's Institution Name of Authorized Signatory: Title of Authorized Signatory: Certification of Recipient Scientist: I have read and understood the conditions outlined in this Agreement and I agree to abide by them in the receipt and use of the MATERIAL. Date: Recipient Scientist Signature Name of Recipient Scientist: Title of Recipient Scientist: Recipient's address for documents: E-mail for documents: Recipient Scientist's address for materials (if different from above):

Any false or misleading statements made, presented, or submitted to the Government, including any relevant omissions, under this Agreement and during the course of negotiation of this Agreement are subject to all applicable civil and criminal statutes including Federal statutes 31 U.S.C. § 3801-3812 (civil liability) and 18 U.S.C. § 1001 (criminal liability including fine(s) and/or imprisonment).

PROVIDER AUTHORIZED SIGNATURES BEGIN ON FOLLOWING PAGE

E-mail for Recipient Scientist:

Provider AUTHORIZED SIGNATURES

Provider Organization: Name of Authorized Official: Title of Authorized Official: Address:	National Institute of Environmental Health Sciences Dr. Elizabeth Denholm Deputy Director Translational Research 111 T.W. Alexander Drive Research Triangle Park, NC 27709
Signature of Authorized Official:	Date:
Name of Authorized Official: Title of Authorized Official:	Dr. William Schrader Deputy Scientific Director
Signature of Authorized Official:	Date:

APPENDIX 1: Detailed Description of Research Project

APPENDIX 1: List of items included in this MTA